

PRELIMINARY NOTES ON SOME NEW SPECIES  
OF AGARICS.

By GEO. F. ATKINSON.

(Read April 19, 1918.)

**Amanita brunnescens** nov. sp. Gregaria vel dispergens, 8-15 cm. alta: pileo convexo dein expanso, fuligineo-brunneo, 4-9 cm. lato, subumbonato, in centro obscuriore, ad marginem pallidiore et frequenter brunneo virgato vel maculato, e calyptra volvæ floccoso squamoso, squamis albis vel pallido-ochraceis, interdum margine pilei albo, rare pileo albo, matura margine pilei interdum striatulo: lamellis leniter attigentibus, albis: sporis quaternis, albis, globosis, 8-10  $\mu$ : stipite albo, abrupte bulboso, floccoso-squamuloso, 4-10 mm. crasso: annulo amplo, membraneo, superiore, albo vel pallide albo, demum murino: bulbo stipitis 2-3 cm. crasso, margine bulbi limbo volvæ curto, acuto prædito. Stipite, bulbo, et interdum carne pilei, tactu brunnescens.

This is one of the most common species of *Amanita* in the eastern United States, and I have observed it for many years. It is usually interpreted as a dark brown form of *Amanita phalloides*. For a number of years I have regarded it as a distinct species. Typical *Amanita phalloides* which I have collected in France has been compared and confirms this opinion. The spores of typical *Am. phalloides* are subglobose to oboval or subellipsoid, and bruises do not change to a reddish brown color. The American plant being a different species may account for different results, obtained in chemical analyses, from those reported for the typical *Amanita phalloides* of Europe.

No. 24277, type, C. U. Herb., ground, woods, west of Cayuga Lake, near Ithaca, N. Y. July 30, 1917. Leva B. Walker collector.

**Amanita pachysperma** nov. sp. Gregaria vel dispergens, 4-5 cm. alta: pileo campanulato dein convexo, umbonato, 1.5-2 cm. lato, cinereo, e calyptra volvæ dense et minute squamuloso, margine ad umbonem striato, carne tenue: lamellis albis, ellipsoideo-ventricosis, basidiis abrupte clavatis, 35-45  $\times$  12-15  $\mu$ : sporis binis, subellipsoideo-obovalibus, 11-15  $\times$  8-10  $\mu$ , sed 20  $\times$  8, 18  $\times$  12, 12  $\times$  8, 11  $\times$  8, 10  $\times$  7, uniguttulatis: stipite albo, leniter bulboso, floccoso-squamuloso, 3-4 mm. crasso: annulo membraneo, albo, superiore et persistente: limbo volvæ libero, persistente.

In shape and color resembles *Amanita cinerea* Bres. (Fung. Trid. 1, 7, pl. 1, 1881), but spores larger, basidia two-spored, and striations on pileus more extended.

No. 3711, type, C. U. Herb., in sandy ground in woods, Blowing Rock, Watauga Co., N. C. Aug. 19–Sept. 19, 1899. G. F. Atkinson collector.

***Hypoloma comatum*** nov. sp. Gregarium vel dispergens, 3–5 cm. altum: pileo ovali dein campanulato, albo, demum nigro-griseo et leniter striatulato, 0.5–1.5 cm. lato, adolescente radiatis hyphis dense præditi, dein sericeo-fibrilloso, margine appendiculato: lamellis stipite adnatis, ellipticis, cinereis dein cinereo-nigrescentibus: cystidiis solum in acie lamellarum, numerosis, clavato-ventricosis vel subcylindricis, membrana tenui,  $40-55 \times 10-12 \mu$ : sporis quaternis, anguste subellipsoideis, purpureo-brunneis vel purpureo-nigrescentibus, levibus,  $12-14 \times 6-7 \mu$ : stipite æquali, albo, bulbiloso, recto vel flexuoso, fibrilloso-squamoso, 1–1.5 mm. crasso.

No. 24195, type, C. U. Herb., on ground on humus and buried twigs, lawn by East Ave., Campus, Cornell University, Ithaca, N. Y. July 16, 1917. G. F. Atkinson collector.

***Hypoloma confertissimum*** nov. sp. Dense cæspitosum, 8–12 cm. altum et 10–20 cm. latum: pileo ovali dein convexo, 1–3.5 cm. lato, hygrophano, pallide argillaceo, demum pallide ochroleuco vel pallide albo, in centro argillaceo et ruguloso, velo universali albo-floccoso, demum pileo fibrilloso-squamoso et appendiculato et pallide cinereo-brunneo maculato vel virgato: lamellis stipite adnato-adnaxis, demum liberatis, ellipticis, confertissimis, cinereis dein purpureo-brunneis, acie alba: cystidiis in superficie et acie lamellarum subfusoides-ventricosis,  $35-50 \times 11-14 \mu$ : sporis quaternis, purpureo-brunneis, levibus,  $5-7 \times 2.5-3 \mu$ : stipite æquali, recto vel flexuoso, albo, cavo, albo-floccoso-squamoso, fragili, 3–5 mm. crasso, membrana mycelii oriente.

No. 25063, type, C. U. Herb., tufts of 50–100 individuals from dead roots or buried wood, in forest of mixed hard wood, Hoop Pole Ridge, west of Oakland, Md. Sept. 24, 1917. G. F. Atkinson collector. This species is related to *Hypoloma aggregatum* Peck, but differs in its smaller spores, different cystidia, yellow mat of mycelium, etc.

***Lactarius nigroviolascens*** nov. sp. Dispergens, 5–6 cm. altus: pileo 3–5 cm. alto, convexo, incurvato, demum expanso et in centrum depresso, interdum umbonato, atro-brunneo, demum fulvo-olivaceo et in centro obscuriore, pruinoso et ruguloso: margine pilei demum

striato et crenato: lamellis stipite adnatis in lineis decurrentibus, subdistantibus, albis dein ochraceis et obscurioribus: sporis quaternis, subglobois: echinulatis, 8–10 $\mu$ : stipite æquali, pileo concolore, minute et densissime tomentuloso: lacte carneque dulci, albo, contactu aëris nigro-violascente.

No. 24257, type, C. U. Herb., ground, woods, Coy Glen near Ithaca, N. Y. July 25, 1917. Leva B. Walker collector. Related to *Lactarius fuliginosus*.

*Lactarius villosozonatus* nov. sp. Dispergens vel subcespitosus, 3–5 cm. altus: pileo 8–12 cm. lato, ochraceo vel ochroleuco, villosus, zonato, convexo et depresso, demum infundibuliforme: margine pilei fortissime incurvato, demum expanso et prominenter crenato: lamellis stipite adnexis et sinuatis, angustis, subdistantibus: sporis subglobois vel leniter elongatis, echinulatis, 8–10 $\mu$ , vel 8–10  $\times$  10–12 $\mu$ : stipite glabro, 1.5–3 cm. crasso: lacte ex hyalino brunnescente, tarde acri.

No. 20215, type, C. U. Herb., ground woods, Port Jefferson, L. I., N. Y. Aug. 26–Sept. 2, 1904. G. F. Atkinson collector.

*Lepiota rhombospora* nov. sp. Gregaria vel solitaria, 3–4 cm. alta: pileo convexo, 8–15 mm. lato, 1 cm. alto, adolescente ochraceo-fulvo, demum ochroleuco granuloso et squamuloso: squamulis cellis rotundatis vel obovatis vel pyriformibus præditis: lamellis stipite adnatis vel adnexis, sinuatis, ventricosis, argillaceis: cystidiis solum in acie lamellarum, lanceoideis, 24–32  $\times$  6–8 $\mu$ : sporis quaternis, bilateralibus, albis, a fronte rhomboideis et utrimque acutiusculis, a latere inequilateralibus, levibus, 4–5  $\times$  3–4 $\mu$ : stipite æquali, pileo concolore, granuloso et squamuloso.

Nos. 24323 and 24324, type, C. U. Herb., in edge of mixed woods, on leaf mold, by Stewart's Camp, Seventh Lake, Adirondack Mts. Aug. 16 and 21, 1917. F. C. Stewart collector.

*Pholiota retiphylla* nov. sp. Gregaria, 2–3 cm. alta: pileo lateritio vel vinaceo-cinnamomeo, 1–2.5 cm. lato, convexo dein expanso, sericeo-tomentosulo, margine incurvato, carne vinaceo tincta: lamellis stipite adnatis, leniter emarginatis, angustatis, confertissimis, vinaceo-rufis, superficie lamellarum venosa et reticulata: cystidiis nullis: sporis quaternis, subovalibus, levibus, rufo-luteis, 5.5–7  $\times$  4–4.5 $\mu$ : stipite interdum bulboso, demum æquali, fibroso-striato, cavo, carne vinaceo-tincta 4–8 mm. crasso: annulo membranaceo, tenui, vinaceo.

No. 18540, type, C. U. Herb., on very rotten moss-covered log, woods, Malloryville moor between McLean and Cortland, N. Y. Aug. 18, 1904. H. S. Jackson and H. H. Whetzel collectors.